REMARKS

Claims 1-8 were examined and reported in the Office Action. Claims 1-8 are rejected. Claims 1-8 are amended. Claims 1-8 remain.

Applicants request reconsideration of the application in view of the following remarks.

I.   Claim Objections

It is asserted in the Office Action that claims 1-8 are objected to for various formalities. Applicant has amended claims 1-8 to overcome the informal claim objections.

Accordingly, withdrawal of the claim objections for claims 1-8 is respectfully requested.

II.   35 U.S.C. § 112

It is asserted in the Office Action that claims 3-8 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Applicant has amended claims 3, 7 and 8 to overcome the 35 U.S.C. § 112, second paragraph rejections.

Accordingly, withdrawal of the 35 U.S.C. § 112 second paragraph rejections for claims 3-8 are respectfully requested.

III.   35 U.S.C. § 102(e)

It is asserted in the Office Action that claims 1, 2 and 7 are rejected in the Office Action under 35 U.S.C. § 102(e), as being anticipated by U. S. Patent No. 6,557,080 issued to Burger ("Burger"). Applicant respectfully traverses the aforementioned rejection for the following reasons.

According to MPEP §2131,

> '[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.' (Verdegaal Bros. v. Union Oil Co. of California, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir.

1987)). 'The identical invention must be shown in as complete detail as is contained in the ... claim.' (Richardson v. Suzuki Motor Co., 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989)). The elements must be arranged as required by the claim, but this is not an ipsissimis verbis test, *i.e.*, identity of terminology is not required. (In re Bond, 910 F.2d 831, 15 USPQ2d 1566 (Fed. Cir. 1990)).

Applicant's amended claim 1 contains the limitations of

... a cell area having N+1 number of unit cell blocks, each including M number of word lines which respectively are coupled to a plurality of unit cells wherein the N number of unit cell blocks are corresponded to logical cell block addresses and one unit cell block is added for accessing data with high speed; a tag block having N+1 number of unit tag blocks, each unit tag block storing at least one physical cell block address storing data wherein the tag block receives a logical cell block address designated for accessing one of N number of unit cell blocks and converts the logical cell block address into a physical cell block address designated for accessing one of the N+1 number of unit cell blocks; and a control means for controlling the tag block and a predetermined cell block table for refreshing the data in the plurality of unit cells coupled to a word line in response to the at least one physical cell block address wherein the tag block stores information representing the converted physical cell block address and a refresh operation is preformed through the use of the information.

Applicant's amended claim 7 contains the limitations of

... (A) starting a refresh mode in response to a refresh signal; (B) finding at least one physical cell block address and word line determined by the physical cell block address having data by checking $(N+1) \times M$ number of registers in the tag block, each register storing a logical block address and an information representing an update of the logical block address; and (C) performing the refresh operation through the use of the information, wherein the N number of unit cell blocks are corresponded to addresses and one unit cell block is added for accessing data with high speed.

Burger discloses a cache structure that allows dynamic control of the size and configuration of a data block fetched by the cache from the memory. It is asserted in the Office Action that a tag block of Applicant's claimed invention is corresponds to a tag memory 28 of Burger. Burger, however, does not disclose, teach or suggest a cell area having N+1 number of

unit cell blocks, each including M number of word lines which respectively are coupled to a plurality of unit cells wherein the N number of unit cell blocks are corresponded to address and one unit cell block is added for accessing data with high speed. Further, the memory circuit of Burger has only memory cell blocks that are corresponded to address and does not have one more unit cell block added for high speed data access.

Therefore, Burger does not disclose, teach or suggest Applicant's claim 1 limitations of

> a cell area having N+1 number of unit cell blocks, each including M number of word lines which respectively are coupled to a plurality of unit cells wherein the N number of unit cell blocks are corresponded to logical cell block addresses and one unit cell block is added for accessing data with high speed,

nor Applicant's claim 7 limitations of "the N number of unit cell blocks are corresponded to addresses and one unit cell block is added for accessing data with high speed."

Therefore, since Burger does not disclose, teach or suggest all of Applicant's amended claims 1 and 7 limitations, Applicant respectfully asserts that a *prima facie* rejection under 35 U.S.C. § 102(b) has not been adequately set forth relative to Burger. Thus, Applicant's amended claims 1 and 7 are not anticipated by Burger. Additionally, the claim that directly depends on amended claim 1, namely claim 2, is also not anticipated by Burger for the same reason.

Accordingly, withdrawal of the 35 U.S.C. § 102(e) rejections for claims 1, 2 and 7 are respectfully requested.

IV.   35 U.S.C. § 103(a)

It is asserted in the Office Action that claim 8 is rejected in the Office Action under 35 U.S.C. § 103(a), as being unpatentable over Burger in further view of U. S. PG Publication No. 2002/0141272 issued to Benedix et al ("Benedix"). Applicant respectfully traverses the aforementioned rejection for the following reasons.

According to MPEP §2142

> [t]o establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the a rt, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. (In re Vae ck, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991)).

Further, according to MPEP §2143.03, "[t]o establish prima facie obviousness of a claimedinvention, all the claim limitations must be taught or suggested by the prior art. (In re Royka, 490 F.2d 981, 180 USPQ 580 (CCPA 1974)." *"All words in a claim must be considered in judging the patentability of that claim against the prior art."* (In re Wilson, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970), emphasis added.)

Applicant's amended claim 8 directly depends on amended claim 7. Applicant has addressed Burger regarding amended claim 7 above in section III.

Benedix discloses a dynamic semiconductor memory. The memory of Benedix includes a control device. In the event of an external refresh command, the control device causes, after the refresh operation, the state of the memory banks to be reestablished. That is, the word line whose address was stored in the register is reactivated. Benedix, however, does not disclose, teach or suggest Applicant's claim 7 limitations of "the N number of unit cell blocks are corresponded to addresses and one unit cell block is added for accessing data with high speed."

Since neither Burger, Benedix, and therefore, nor the combination of the two, teach, disclose or suggest all the limitations of Applicant's amended claim 7, as listed above, Applicant's amended claim 7 is not obvious over Burger in view of Benedix since a *prima facie* case of obviousness has not been met under MPEP §2142. Additionally, the claim that directly depends from amended claim 7, namely claim 8, would also not be obvious over Burger in view of Benedix for the same reason

Accordingly, withdrawal of the 35 U.S.C. § 103(a) rejection for claim 8 is respectfully requested.

V.   Double Patenting

It is asserted in the Office Action that claims 1-3 and 7-8 are provisionally rejected for nonstatutory double patenting and states that a timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned.   Applicant respectfully traverses the aforementioned rejection for the following reasons.

Applicant's amended claims 1 and 7 are absolutely different from claim 42 of US10/696,144.   That is, amended claims 1 and 7 are focused on a refresh operation, but claim 42 of US 10/696,144 does not relate to a refresh operation.

Accordingly, withdrawal of the nonstatutory rejections for claims 1-3 and 7-8 are respectfully requested.

CONCLUSION

In view of the foregoing, it is believed that all claims now pending, namely 1-8, patentably define the subject invention over the prior art of record and are in condition for allowance and such action is earnestly solicited at the earliest possible date.

If necessary, the Commissioner is hereby authorized in this, concurrent and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2666 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17, particularly extension of time fees.   If a telephone interview would expedite the prosecution of this Application, the Examiner is invited to contact the undersigned at (310) 207-3800.

Respectfully submitted,

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Dated: May 23, 2006   By: _____
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CERTIFICATE OF MAILING
I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail with sufficient postage in an envelope addressed to: Mail Stop RCE, Commissioner for Patents, P. O. Box 1450, Alexandria, Virginia 22313-1450 on May 23, 2006.

Jean Svoboda